

REMARKS:

In the foregoing amendments, independent claim 1 was amended to further define the lower limit of Fe in an amount of at least 20.6 %, which is shown in run No. "D" in table 1 on page 17 of applicant's specification disclosure. Claim 1 was also amended by changing the lower limit of Ni from 30% to 39.9%, which is shown in run No. "C" in table 1 on page 17 of applicant's specification disclosure. Claims 1-20 remain in the application for consideration by the examiner. Early consideration and allowance of these claims are respectfully requested.

Claims 1-3, 6, 9-13, 15-16, and 18-19 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of U.S. patent No. 5,779,972 of Noda *et al.* (Noda) or U.S. patent No. 4,871,512 of Takagi *et al.* (Takagi). Claims 1-3, 6, 9-13, 15-16, and 18-19 were also rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of copending application No. 10/371,363 (US 2003/0164213) of Ueta *et al.* (Ueta). In these type of rejection (under the judicially created doctrine of obviousness-type double patenting), only the claims are available as prior art. The Official action also set forth a rejection of claims 1-3, 6, 9-13, 15-16 and 18-19 under 35 U.S.C. § 103 as being unpatentable over Noda, Takagi, or Ueta.

Applicant respectfully submits that the teachings of Noda, Takagi, or Ueta, either alone or in combination, do not disclose or suggest the invention defined in claims 1-3, 6, 9-13, 15-16 and 18-19 within the meaning of 35 U.S.C. §102 or 35

U.S.C. § 103, or under the judicially created doctrine of obviousness-type double patenting.

The claims and discussions of Noda (see, for example, claim 1) propose an Ni-content of 30-35 wt. %. In contrast thereto, the alloy set forth in applicant's claim 1, and the claims that depend thereon, require 39.9-62 wt. % of Ni. For this reason alone, applicant respectfully submits that the teachings of Noda cannot motivate one of ordinary skill in the art to the invention as set forth in present claim 1 and the claims that depend thereon.

In addition, the claims and discussions of Noda (see, for example, claims 1 and 2) do not contain W and Mo in the amounts required in the present claims, or contain amounts of W and Mo outside applicant's claimed range. Therefore, applicant respectfully submits that the claims and discussions of Noda could not motivate one of ordinary skill in the art to the invention as set forth in present claim 1 and the claims that depend thereon.

With respect to the claims and discussions of Takagi and Ueta (see, for example, claim 1 of each), these propose amounts of Fe less than that required in the present claims. Namely, Takagi proposes only 5 wt. % or less of Fe, and Ueta proposes 20 wt. % or less of Fe. In contrast thereto, the alloy set forth in applicant's claim 1, and the claims that depend thereon, require at least 20.6 wt. % of Fe. Therefore, applicant respectfully submits that the claims and discussions of Takagi and Ueta could not motivate one of ordinary skill in the art to the invention as set forth in present claim 1 and the claims that depend thereon.

Claims 1-20 were rejected under 35 U.S.C. § 103 as being unpatentable over EP 0639654 of Sato *et al.* (Sato). Applicant respectfully submits that the presently claimed invention is patentably distinguishable from the teachings of Sato with the meaning of 35 U.S.C. §103(a) for at least the following reasons.

At the bottom of page 4 of Sato, there is a general discussion proposing Al content. At the top of page 5 of Sato, it is explained that the preferable Al content is not less than 1.6 to 3.0%, or more preferably 1.8 to 2.4%. These preferable amounts of Al in Sato are outside the range for Al (0.7 wt. % or higher and less than 1.6 wt. %), as set forth in the present claims. Most importantly, the teachings of Sato do not recognize or appreciate the importance and significance of the presently claimed Al content (0.7 wt. % or higher and less than 1.6 wt. %) and the presently claimed ratio of Ti/Al (1.6 or more to less than 2.0). For example, none of alloys 1-23 in table 1 of Sato, which are in accordance with the invention proposed therein, meet both the requirements of Al-content and Ti/Al ratio of applicant's claims. This combination of requirements in applicant's claimed invention provides the presently claimed invention with unexpected advantages. Table 1 on page 17 of the present specification sets forth working examples A-H containing amounts of alloy ingredients within the range set forth in the present claims, including the presently claimed amount of Al and the presently claimed ratio of Ti/Al. In table 2 of the present application, control Nos. 1, 3, and 4 have a ratio of Ti/Al outside the range of applicant's claims, but apparently within

that proposed by Sato. In addition, control Nos. 2 and 5 contain amounts of Al outside of applicant's claimed range, but within the range proposed by Sato. The data in tables 3-6 on pages 19 and 20 other present specification show that the working examples A-H have a good balance of properties, while control Nos. 1-5 have vastly inferior properties. Among other things, control No. 1 does not have good workability at high temperature. Control No. 2, notwithstanding the low Ti/Al ratio, has low hardness and low hot workability. Control No. 3 also has low hot workability. Control No. 4 has insufficient fatigue strength. Control No. 5 has very poor hardness. In other words, the data in applicant's specification disclosure demonstrates that the presently claimed alloy, including the presently claimed amount of Al and the presently claimed ratio of Ti/Al, is unexpectedly superior to the alloys of the working examples, which encompassed the alloys proposed by Sato. For these reasons, applicant respectfully submits that the presently claimed alloy is patently distinguishable from the teachings of Sato. Therefore, applicant respectfully requests that the examiner reconsider and withdrawal the rejection of the present claims over the teachings of Sato.

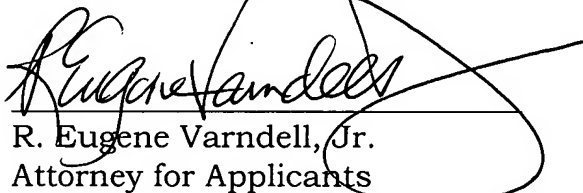
For all these reasons, applicant respectfully submits that the invention set forth in claim 1, as well as the claims that depend thereon, are patently distinguishable from the discussion and claims of Noda, Ueta, and/or Takagi, as well as the teachings of Sato. Therefore, applicant respectfully requests that the

examiner reconsider and withdraw all the rejections set forth in the outstanding Office action and allow claims 1-20.

While it is believed that the present response places the application in condition for allowance, should the examiner have any comments or questions, it is respectfully requested that the undersigned be telephoned at the below listed number to resolved any outstanding issues.

In the event this paper is not timely filed, applicant hereby petitions for an appropriate extension of time. The fee therefor, as well as any other fees which may become due, may be charged to our deposit account No. 22-0256.

Respectfully submitted,  
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